

IGNITION ACTUATION MECHANISM FOR PIEZOELECTRIC LIGHTER

ABSTRACT

The present invention provides an ignition actuation mechanism  
5 for the manual actuator of a spark producing device in a fuel gas lighter  
to increase the actuation force immediately before spark discharge  
without unreasonably increasing the actuation force at the initial  
stages of movement of the manual actuator to reduce that chances of  
inadvertent ignition by small children, but maintaining good  
10 operability for adult users. Movement of the manual actuator is always  
resisted by a first elastic member while a second elastic member is  
positioned to resist movement of the manual actuator at a maximum of  
30N to 50N after 60% or more of the total movement of the manual actuator  
required to produce a spark has occurred. Preferably the second elastic  
15 member is one or more flexible fingers molded from polyacetal resin.

*Express Mail #EV141705342US*